Kafr El-Sheikh University
Faculty of Aquatic and Fisheries Sciences
Winter semester of the academic year 2019/2020

Suggested research topics

Winter semester of the academic year 2019/2020

Course name in Arabic: بيولوجيا المصايد
Course name in English: Fisheries Biology
Dr.: Alaa Mahmoud El-Far
Level: Third Level
Department: Biotechnology and Fish Processing

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No.	Research title	Research items
1	**Fish identification**	1- **Fish classification methods.** 2- **Technical terms & measurements** 3- **Fish morphometric** 4- **Meristic equation** 5- **How to identify new fish species**
2	**Fisheries Types**	1- **Identification** 2- **Industrial fisheries** 3- **Artisanal fisheries** 4- **Game fisheries** 5- **Types of fisheries in Egypt**
3	**Fishing gears and Methods**	1- **Fishing trail identification** 2- **Active fishing gear** 3- **Target species** 4- **Static fishing gears** 5- **Target species**
4	**Age determination in Fishes**	1- **Mark- recapture method** 2- **Length frequency method** 3- **Hard structure method** 4- **Time of annulus formation** 5- **Back-calculation of length at age**
5	**Growth estimation in Fishes**	1- **Length- weight relationship** 2- **Condition factor** 3- **von Beratanffy growth parameters and equation** 4- **Growth performance**
6	**Fish reproduction**	1- **Sex ratio variation** 2- **Gonado- somatic index** 3- **Hepato- somatic index** 4- **Maturity stages** 5- **Spawning season**

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7	**Fish Fecundity**	1- Absolute and relative fecundity 2- Ova maturation and diameter 3- Fecundity- fish length relationship 4- Fecundity- fish weight relationship 5- Fecundity- fish age relationship
8	**Fish Food and feeding habit**	1- Food items types 2- Stomach fullness 3- Gut content analysis 4- Fish feeding habit 5- Feeding intensity
9	**Trophic level**	1- Aquatic food web and food chain 2- Fish trophic levels 3- Fishing gear catch trophic 4- Total catch trophic 5- Fishing impact in food web.
10	**Fish population structure**	1- Length frequency distribution 2- Length and age at first capture 3- Mortalities rates 4- Maximum and optimum length 5- Length and age at recruitment 6- Virtual population analysis
11	**Stock assessment**	1- Concepts 2- Stock biomass 3- Dependent and in-dependent data 4- Accuracy, precision and bias 5- Yield and biomass per recruits
12	**Fisheries management**	1- What is fisheries management 2- Relation between stock assessment and resource manegment 3- Fisheries issues identifications 4- Fisheries management approaches 5- Fisheries management measures

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Signature: